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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,498	02/23/2004	Dmitry Grebenev	063170.6658	2208

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EXAMINER	
MEHRMANESH, ELMIRA	
ART UNIT	**PAPER NUMBER**
2113	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/20/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/20/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/784,498	GREBENEV, DMITRY	
	Examiner	Art Unit	
	Elmira Mehrmanesh	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to an amendment filed on January 22, 2007 for the application of Grebenev, for a "Kernel-level method of flagging problems in applications" filed February 23, 2004.

Claims 1-20 are pending in the present application.

Claims 1-20 are rejected under 35 USC § 102.

Affidavit/Declaration of Rule 37 C.F.R. § 1.131

The Declaration filed on January 22, 2007 under 37 CFR 1.131 is sufficient to overcome the Sen (U.S. PGPUB No. 20040261081) and Herger et al. (U.S. PGPUB No. 20020161932) references.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (U.S. Patent No. 5,684,945).

As per claim 1, Chen discloses a method of identifying problems in applications (Fig. 1), comprising:

monitoring (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) at a kernel level system resource usage of one or more running applications (col. 26, lines 31-35 and 49-52) without modifying run-time environments of the running applications (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and identifying (col. 26, lines 57-63, *host name, process ID*) from the monitored system usage (col. 16, lines 19-23, *threshold alarm*) an application whose system usage pattern satisfies a predetermined criteria (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 2, Chen discloses the system resource usage comprises one or more processes that the one or more running applications have spawned (col. 37, lines 55-63).

As per claim 3, Chen discloses the system resource usage comprises central processing unit usage of the one or more running applications (col. 8, lines 25-31).

As per claim 4, Chen discloses the system resource usage comprises memory usage of the one or more running applications (col. 26, lines 49-52).

As per claim 5, Chen discloses producing an output comprising at least the system resource usage associated with each of the one or more running applications (col. 9, lines 41-51, *data display system*) and (col. 87, lines 25-28, *output of a data*

filter).

As per claim 6, Chen discloses identifying (col. 26, lines 57-63, *host name, process ID*) from the output (col. 9, lines 41-51, *data display system*) an application whose system usage pattern satisfies (col. 16, lines 19-23, *threshold alarm*) a predetermined criteria (col. 87, lines 53-56) associated with one or more problems (col. 87, lines 10-15) and (col. 92, lines 56-60).

As per claim 7, Chen discloses the predetermined criteria is an increase in amount of the system resource usage (col. 92, lines 47-67) from a first period to a second period (col. 87, lines 10-15). Chen discloses the flexibility of defining filters (col. 93, lines 6-10) and observing the change in the statistic values taken at different times (col. 50, lines 46-51).

As per claim 8, Chen discloses the predetermined criteria is a continuous increase in amount of the system resource usage (col. 92, lines 47-67) from a first period to a second period (col. 87, lines 10-15). Chen discloses the flexibility of defining filters (col. 93, lines 6-10) and observing the change in the statistic values taken at different times (col. 50, lines 46-51).

As per claim 9, Chen discloses using an available kernel level tool to obtain data associated with the system resource usage (Fig. 1, element 90).

As per claim 10, Chen discloses using an available kernel level tool to obtain data that includes the system resource usage (Fig. 1, element 90) and filtering the data to obtain a selected system resource usage (col. 87, lines 10-15).

As per claim 11, Chen discloses using the filtered data to identify (col. 26, lines 57-63, *host name, process ID*) an application (col. 16, lines 19-23, *threshold alarm*) an application whose system usage pattern satisfies a predetermined criteria (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 12, Chen discloses a method of identifying memory problems in applications (col. 27, lines 47-67 through col. 28, lines 1-14) and (col. 81, lines 38-45), comprising:

monitoring (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) at a kernel level memory usage of a running application (col. 26, lines 31-35 and 49-52) without modifying a run-time environment of the running application (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and producing an output (col. 9, lines 41-51, *data display system*) and (col. 27, lines 47-67 through col. 28, lines 1-14) comprising at least the memory usage (col. 26,

lines 49-52).

As per claim 13, Chen discloses analyzing the output (col. 81, lines 38-45) to identify a memory problem (col. 26, lines 49-52).

As per claim 14, Chen discloses a method of identifying memory problems (col. 27, lines 47-67 through col. 28, lines 1-14) and (col. 81, lines 38-45) in applications, comprising:

monitoring (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) at a kernel level memory usage of a running application (col. 26, lines 31-35 and 49-52) without modifying a run-time environment of the running application (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and producing an output (col. 9, lines 41-51, *data display system*) and (col. 27, lines 47-67 through col. 28, lines 1-14) comprising at least the memory usage of one or more running applications (col. 26, lines 49-52)

and identifying (col. 26, lines 57-63, *host name, process ID*) from the output (col. 27, lines 47-67 through col. 28, lines 1-14) an application whose memory usage (col. 26, lines 49-52) pattern (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 15, Chen discloses a method of identifying memory problems (col. 27, lines 47-67 through col. 28, lines 1-14) and (col. 81, lines 38-45) in applications, comprising:

monitoring (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) at a kernel level memory usage of a running application (col. 26, lines 31-35 and 49-52) without modifying a run-time environment of the running application (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and identifying (col. 26, lines 57-63, *host name, process ID*) from the monitored memory usage (col. 26, lines 49-52) an application whose memory usage (col. 26, lines 49-52) pattern (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 16, Chen discloses the monitored memory usage comprises at least a stack memory, data memory, and text memory (col. 26, lines 49-63).

As per claim 17, Chen discloses a method of identifying memory problems in applications (col. 27, lines 47-67 through col. 28, lines 1-14) and (col. 81, lines 38-45), comprising:

collecting (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) system recourse usage at a kernel level of the running applications (col. 26, lines 31-35 and 49-52) without modifying run-time environments of the running applications (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and identifying (col. 26, lines 57-63, *host name, process ID*) from the collected system resource usage (col. 16, lines 19-23, *threshold alarm*) an application whose

system usage pattern satisfies a predetermined criteria (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 18, Chen discloses a system for identifying problems in applications (Fig. 1), comprising:

a data collection module operable to retrieve information about a running application at a kernel level (col. 6, lines 60-67)

and a data analysis module operable to determine from the retrieved information an abnormal system usage pattern in the information (col. 81, lines 38-47).

As per claim 19, Chen discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps of identifying problems in applications (Fig. 1), comprising:

monitoring (col. 6, lines 61-63 and Fig. 1, element 90, *performance tool*) at a kernel level system resource usage of one or more running applications (col. 26, lines 31-35 and 49-52) without modifying run-time environments of the running applications (col. 21, lines 65-69 through col. 22, lines 1-2 and 42-52)

and identifying (col. 26, lines 57-63, *host name, process ID*) from the monitored system usage (col. 16, lines 19-23, *threshold alarm*) an application whose system usage pattern satisfies a predetermined criteria (col. 87, lines 53-56) associated with one or more problems (col. 92, lines 56-60).

As per claim 20, Chen discloses the system resource usage is memory usage (col. 26, lines 49-63), CPU usage (col. 8, lines 25-31), or one or more spawned processes (col. 37, lines 55-63), or combinations thereof (col. 8, lines 25-31).

Response to Arguments

Applicant's arguments filed on January 22, 2007 with respect to the rejection(s) of claim(s) 1-20 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Chen et al. (U.S. Patent No. 5,684,945). Refer to the corresponding section of the claim analysis for details.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elmira Mehrmanesh whose telephone number is (571) 272-5531. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).